# Gulf of Mexico Harmful Algal Bloom Bulletin

26 February 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: February 22, 2007

## Conditions Report

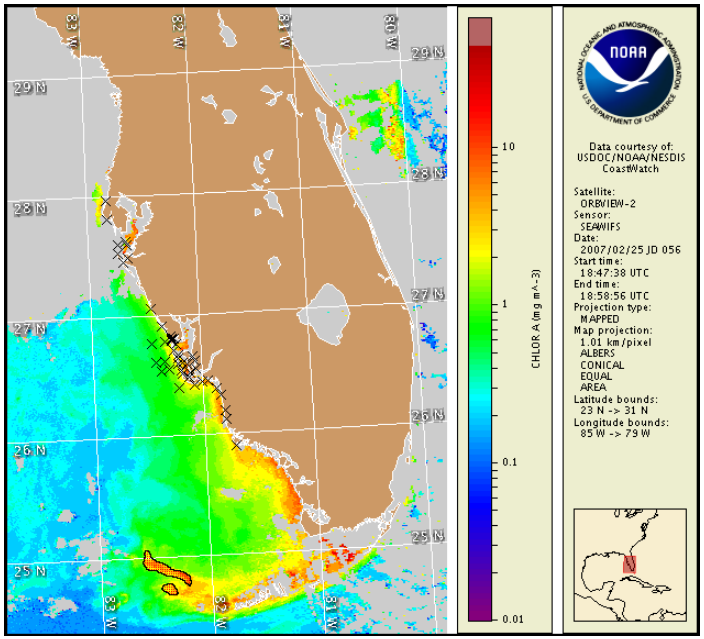
A harmful algal bloom has been identified south of the Lower and Middle Keys in Monroe County. Patchy very low impacts are possible Today, Tuesday and Thursday in this region. No other impacts are expected through Thursday in SW Florida.

## Analysis

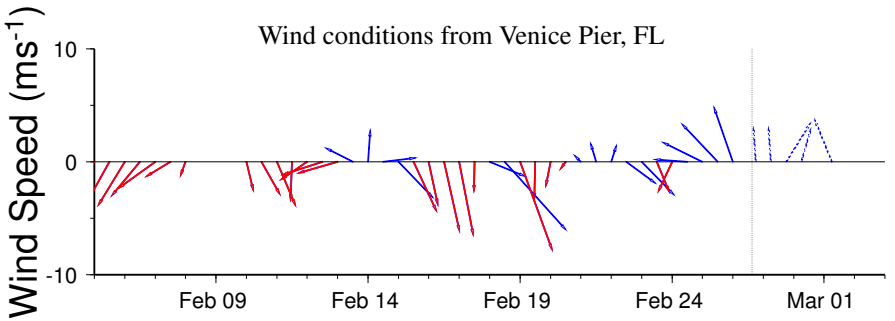
Sampling continues to confirm the absence of *K. brevis* along the SW Florida coast. Chlorophyll levels correspond with these reports, having generally dissipated over much of the coastline in the past few weeks. Chlorophyll does remain elevated in a band approximately 2nm offshore northern Collier County from Barefoot Beach to Naples Pier, with a maximum chlorophyll concentration of approximately 7$\mu$g/L at 26°14.5'N 81°51.3'W. Sampling is recommended. Chlorophyll levels south of Cape Romano have decreased slightly since last reported. Both regions will continue to be monitored via satellite imagery. Onshore transport of identified features is possible today and Tuesday. Intensification through Thursday is not expected.

A harmful algal bloom persists northwest of the Marquesas Keys and south of the Lower and Middle Keys. Background to very low concentrations of *K. brevis* were identified last week southwest of Marathon and Key West (MML, 2/20-22). A large band of elevated chlorophyll (up to 8$\mu$g/L) continues to appear in satellite imagery northwest of Key West, currently extending from 25°7.1'N 82°36.6'W (northernmost point) southeast to 24°46.4'N 82°11.9'W and west to 24°46.6'N 82°29.9'W (southwestern point). Sampling is recommended. Chlorophyll also remains elevated east of Big Pine Key (8$\mu$g/L) and south of Vaca and Grassy Keys (3$\mu$g/L). South to southwesterly winds may increase the potential for impacts on the oceanside Lower and Middle Keys today, Tuesday and Thursday. Easterly and slight onshore transport is possible south of the Lower and Middle Keys through Thursday. Intensification is not expected through Thursday.

~Fisher, Fenstermacher



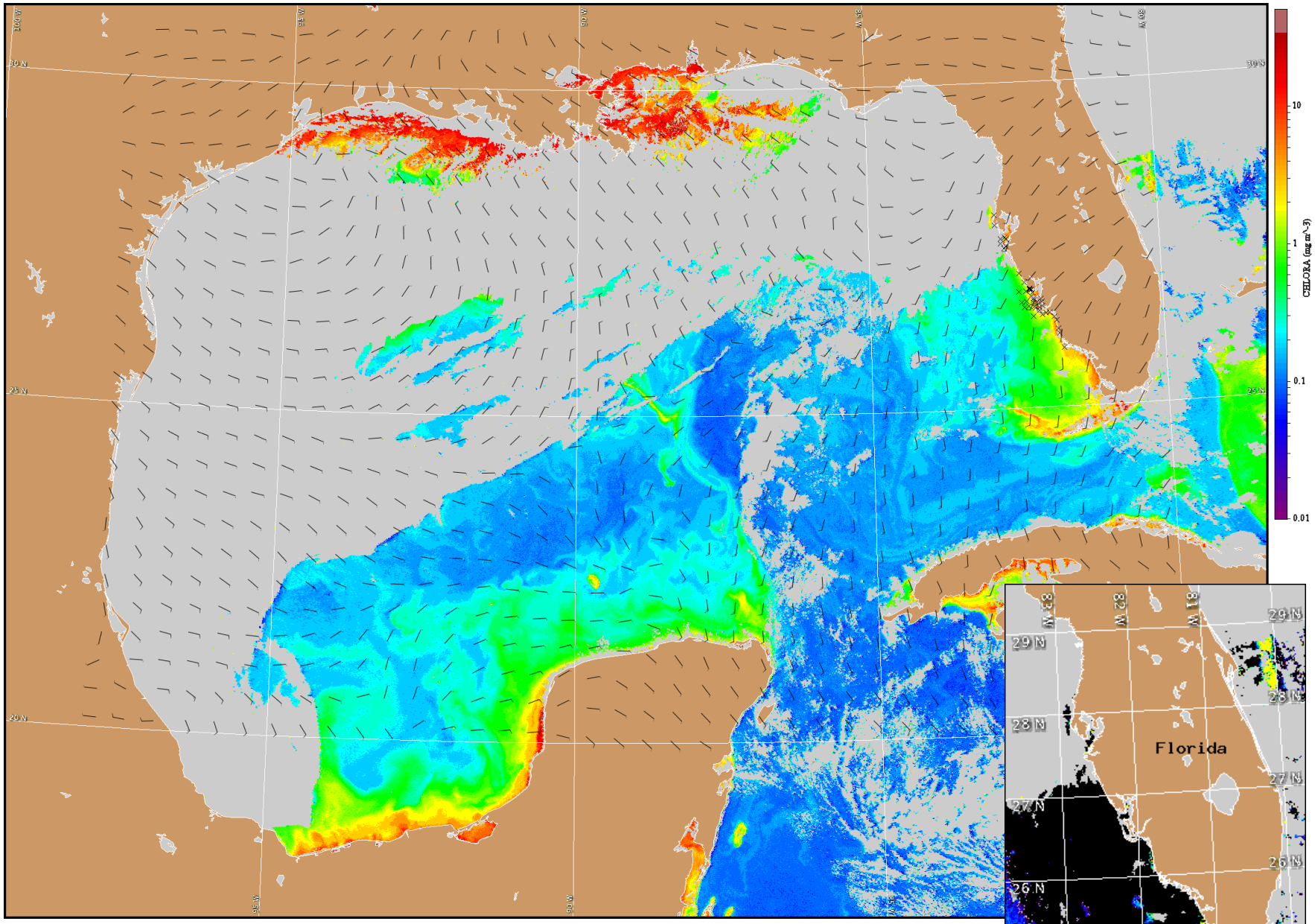

Satellite chlorophyll image with possible HAB areas shown by red polygon(s).Cell concentration sampling data from February 16-22 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the the HABFS bulletin guide: http://www.csc.noaa/gov/crs/habf/habfs_bulletin_guide.pdf




Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Southwest winds today (10kts, 5m/s), shifting west and variably Tuesday (5-10kts, 3-5m/s). North to northeast winds Tuesday night and easterly on Wednesday (5-10kts, 3-5m/s). Stronger southeast winds expected Thursday (15-20kts, 8-10m/s).

Keys: South winds (10-15kts, 5-8m/s)today, shifting southwest tonight into Tuesday (10kts, 5 m/s). East winds Wednesday (10kts, 5 m/s). East to southeast winds Thursday (10-15kts, 5-8m/s).




Satellite chlorophyll image and forecast winds for February 27, 2007 12Z with cell concentration sampling data from February 16-22 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the the HABFS bulletin guide: http://www.csc.noaa/gov/crs/habf/habfs_bulletin_guide.pdf

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL